

Press Release – for immediate release

USFWS & MN DNR Cooperate on Pilot Project to Improve Waterfowl Habitat

The US Fish and Wildlife Service's Fergus Falls Wetland Management District and the Minnesota Department of Natural Resources Fergus Falls Area Fisheries Office have cooperated on a pilot project to eradicate invasive fish from Kube Waterfowl Production Area.

Historically fish were not present in most of the prairie pothole wetlands of western Minnesota. Human alteration of the land has connected wetlands, lakes, rivers, and streams with ditches and tiles which has permitted fish to move places they previously could not. Very wet climatic conditions over the past 15 years have also led to more overland flowing of water during the spring of the year and following large rain events. New drainages as well as overland water flow from full wetlands and lakes have allowed a number of undesirable fish species to invade many of these prairie wetlands.

Once invasive fish species enter a clear water body, they consume the majority of aquatic insects and zooplankton. Zooplankton normally consume the algae in the water keeping the water clear. When zooplankton numbers are greatly reduced, algae grows out of control. The water becomes cloudy and the algae shade submerged plants killing them. These plants are a source of food for zooplankton and keep sediment stabilized with their roots. Once the rooted plants are gone, sediment can easily be lifted from the bottom of the marsh by waves. The sediment suspension and algae perpetuate the problem. Nutrient loading exacerbate this degraded state. Without a dramatic change in the system, the lake will remain in the degraded state.

The two agencies recently treated a 128 acre shallow lake to remove the invasive fish present in that water body. The shallow lake is located on the Kube Waterfowl Production Area in southwestern Otter Tail County. The basin was treated with a natural substance called Rotenone. Rotenone disrupts a fish's ability to absorb oxygen into its cells and is used to remove fish from water bodies.

The shallow lake was treated due to excessive turbidity and degraded wetland habitat. The turbidity problem is believed by researchers to be primarily caused by fish that feed on the zooplankton in the water as well as aquatic insects and plants on the bottom of the basin, like bullheads, carp, and fathead minnows. These species are invasive when they enter water bodies that have existed fish free.

Removing the fish can shock the system into switching back to the clear water state. Rotenone treatments and drawing the water down to induce winterkill are two ways that fish can be removed. Introducing fish like walleyes, that consume other fish, is another method being explored to remove the problem fish from the water body. Keeping invasive fish out after the treatment is also important. The longer we can keep fish out, the longer the marsh will stay clear and productive for waterfowl. It appears to take anywhere from just a couple of months up to two or three years to see the water clear up following a fish removal.

The lake at Kube WPA will be stocked with walleye fry. The reclamation ensures that invasive fish will not consume the stocked walleyes. A barrier was also constructed at the outlet of this shallow lake to prevent invasive fish from reentering. The barrier called a high velocity tube is a smooth walled pipe 60 feet long and set a 5 percent slope. This length and pitch along with smooth walls will prevent fish from swimming upstream and reentering this lake.

Minnesota sportsmen are strongly advocating more productive habitats for waterfowl, better hunting opportunities for waterfowl, productive walleye populations, and better walleye fishing opportunities. This pilot project is a partnership between the US Fish and Wildlife Service and the Minnesota Department of Natural Resources Fisheries Division. Through this partnership, both waterfowl and walleyes stand to benefit. Agency personnel stand to gain valuable information regarding the effectiveness of both walleye stocking to reduce invasive fish populations as well as rotenone and fish barrier projects to remove and prevent reinvasion of invasive fish.

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